

Patent Abstracts of Japan

PUBLICATION NUMBER : 2002145083
PUBLICATION DATE : 22-05-02

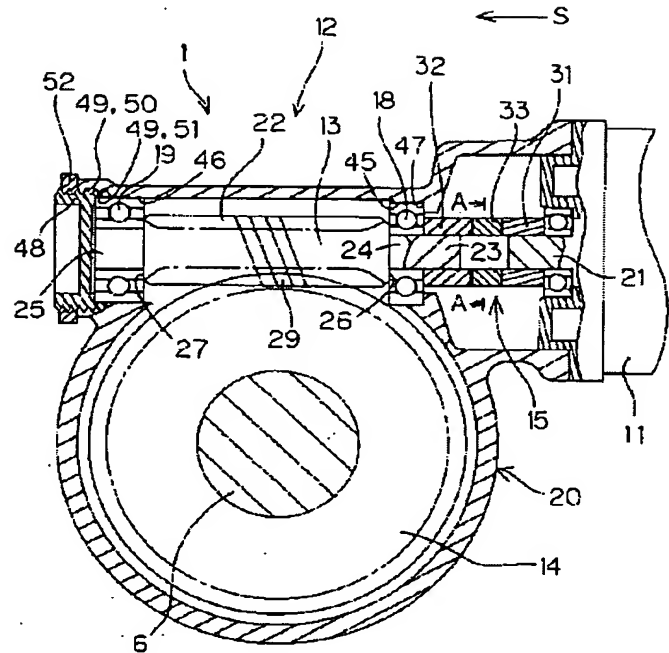
APPLICATION DATE : 08-11-00
APPLICATION NUMBER : 2000340753

APPLICANT : KOYO SEIKO CO LTD;

INVENTOR : NAKAMURA YASUHIRO;

INT.CL. : B62D 5/04 F16D 3/12 F16F 15/136
F16H 1/16 H02K 7/06 H02K 7/10

TITLE : POWER STEERING DEVICE AND
JOINT UNIT



ABSTRACT : PROBLEM TO BE SOLVED: To solve a problem of feeling an unpleasant feeling when steering auxiliary force by an electric motor suddenly changes at kickback time in an electric power steering device of an automobile.

SOLUTION: In this power steering device 1, an elastic member 33 is interposed between a rotary shaft 21 of the electric motor 11 and a worm shaft 13 to transmit torque. The elastic member 33 relieves a sudden change in the torque from the electric motor 11 at kickback time, in its turn, a sudden change in the steering auxiliary force, and reduces the unpleasant feeling. An adjusting member 48 for positioning the worm shaft 13 in the shaft direction for adjusting a backlash of the worm shaft 13 and a worm wheel 14, is used in common for compressing the elastic member 33 for removing looseness and transmitting the torque so that a structure can be simplified. Thus, the electric motor hardly becomes an overload state.

COPYRIGHT: (C)2002,JPO